What is claimed is:

1. A semiconductor device characterized by having boron, carbon and nitrogen as main components, and a coating to which sulfur has been added serves as surface protection and covers at least part of a surface.

2. The semiconductor device of Claim 1, characterized in that a carbon composition ratio (atomic ratio) of the coating is at least 0.1.

3. The semiconductor device of one of Claim 1 and Claim 2, characterized in that oxygen is included in the coating.

4. The semiconductor device of any one of Claims 1 to 3, characterized by having a multi-layer structure with a heterogeneous film attached to the coating.

5. The semiconductor device of any one of Claims 1 to 4, characterized in that the heterogeneous film contains an amount of structural elements different to the coating.

6. The semiconductor device of any one of Claims 1 to 4, characterized in that the heterogeneous film is a film with main components identical to the coating, without sulfur being added thereto.

7. The semiconductor device of any one of Claims 1 to 4, characterized in that the heterogeneous film is a film with silicon as a main component.

8. The semiconductor device of any one of Claims 1 to 7, characterized by having a III-V compound semiconductor.

9. The semiconductor device of any one of Claims 1 to 8, characterized in that the semiconductor is a field effect

transistor.

10. The semiconductor device of any one of Claims 1 to 9, characterized in that the semiconductor is a bipolar transistor.

11. The semiconductor device of any one of Claims 1 to 8, characterized in that the semiconductor is a diode.

12. A semiconductor device fabrication method characterized by disposing a film formation substrate in a plasma atmosphere containing nitrogen, supplying boron atoms, carbon atoms and sulfur atoms to the film formation substrate, and forming a boron carbon nitride film to which sulfur has been added.

13. A semiconductor device fabrication method characterized by disposing a film formation substrate facing a boron nitride sputter portion, supplying carbon atoms and sulfur atoms to the film formation substrate, and forming a boron carbon nitride film to which sulfur has been added.

14. A semiconductor device fabrication method characterized by disposing a film formation substrate facing a boron nitride and carbon sputter portion, supplying sulfur atoms to the film formation substrate, and forming a boron carbon nitride film to which sulfur has been added.

15. A semiconductor device fabrication method characterized by disposing a film formation substrate facing a boron nitride laser abrasion, supplying plasma

containing carbon atoms and sulfur atoms to the film formation substrate, and forming a boron carbon nitride film to which sulfur has been added.

16. A semiconductor device fabrication method characterized by disposing a film formation substrate facing a boron nitride and carbon laser abrasion, supplying plasma containing sulfur atoms to the film formation substrate, and forming a boron carbon nitride film to which sulfur has been added.

17. The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a field effect transistor.

18. The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a bipolar transistor.

19. The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a diode.

20. A communication system device characterized by having the semiconductor device of any one of Claims 1 to 11.